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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,824	07/30/2003	Shin Aoki	RCOH-0096DIV	8147
21302 7590 07/09/2008 KNOBLE, YOSHIDA & DUNLEAVY EIGHT PENN CENTER SUITE 1350, 1628 JOHN F KENNEDY BLVD PHILADELPHIA, PA 19103			EXAMINER HENN, TIMOTHY J	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 07/09/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

KJDUNLEAVY@PATENTWISE.COM

<b>Office Action Summary</b>	<b>Application No.</b> 10/630,824	<b>Applicant(s)</b> AOKI ET AL.	
	<b>Examiner</b> Timothy J. Henn	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see response, filed 16 June 2008, with respect Hieda and Crane have been fully considered and are persuasive. The 35 USC §103(a) rejections have been withdrawn.
2. Applicant argues that the present invention includes a chroma value generation unit which is also called a "chromacity conversion unit", which performs adjustment of the chroma values according to spatially corresponding coefficients and points to the disclose beginning on the fifth line from the bottom of page 8 in support. The specification on page 8 describes "a chroma value generation or chromaticity conversion unit 130" which includes "a 2 x 3 matrix containing coefficients which spatially correspond to a specific set of color-component photo sensor elements". On page 9, the specification shows an example equation of how to convert from RGB values to YCrCb values (e.g. equation 4). However, it is unclear how the coefficients described correspond in any way, let alone spatially, to specific color-component elements. As described on page 9, the coefficients are determined based on mathematical relationships between the RGB color-space and the YCrCb color space. Furthermore, the claims as written describe a two step process in which chroma values are generated and the chroma values are adjusted using spatially corresponding coefficients. However, the specification at best appears to disclose generating chroma values using spatially corresponding coefficients. Therefore, while the prior art does not disclose generating chroma values and adjusting the chroma values using spatially

corresponding coefficients as claimed, upon further review of the claims and specification, a 35 USC §112 rejection is made below.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**[claims 1-51]**

5. The claims as written require generating chroma values and adjusting *the* chroma values (i.e. adjusting the chroma values which were generated in the first step) according to the specific spatial pattern of the color-component specific elements based upon coefficients that spatially correspond to a specific set of the color-component specific photo elements. In contrast, the specification discloses "a chroma value generation or chromaticity conversion unit 130" which includes "a 2 x 3 matrix containing coefficients which spatially correspond to a specific set of color-component photo sensor elements" (p. 8). Specifically, page 9 of the specification shows equations for creating chroma values, however no adjustment to the generated chroma values

using spatially corresponding coefficients is shown, and the coefficient matrix is described as being for "enabling a conversion between NTSC-RGB and Cr-Cb color space" (p. 8, last 3 lines). Therefore, the specification describes at best a single step process in which chroma values are generated using spatially corresponding coefficients (p. 8 - p. 10), but does not disclose adjusting the generated chroma values using such coefficients. While there is disclosure of the use of a smoothing filter to process the generated chroma values (p. 10), the smoothing filter described does not use spatially corresponding coefficients as claimed. Therefore, since there is no disclosure of generating chroma values and adjusting *the* chroma values using spatially correspond coefficients, the claimed subject matter was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

i. Girod

US 5,565,931

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571)272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Henn/  
Primary Examiner, Art Unit 2622